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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,929	07/13/2001	Jayme Edwards	01SW076	2353

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EXAMINER	
LE, HIEU C.	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/904,929	EDWARDS, JAYME	
	Examiner	Art Unit	
	Hieu c. Le	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11-15,21-29 and 31-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11-15,21-29 and 31-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10-5-04,10-17-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The amendment filed 7/05/05 has been entered and made in record.

2. Applicant's argument filed 7/05/05 with regard to claims 1, 21 have been fully considered but they not persuasive for following reasons:

As to claims 1&21, Applicant alleges that " Crater fails to teach [,]", (p. 8 line 17-p. 9, line 13). The Examiner disagrees. Firstly, Carter et al. discloses an applet (an instruction that preserves an instance of a software object) transmitted by the controller with the web page to the client (col.7, lines 7-10), i.e. the applet is on the web server. the applet is capable of updating the viewer's display every 15 sec (i.e., persistence instruction). the applet causes the browser to communicate with the server controller every 15 sec to obtain new Cap-Time data (i.e., the persistent applet causes communication after session cessation every 15 sec.) (col. 20, lines 26-37).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-15, 21-29, 31-35 are rejected under 35 .S.C. 102(e) as anticipated by Carter et al. [US.Pat. No. 6,201,996] .

As to claim 1, Crater discloses an industrial control system interface (Fig. 1 & 2) comprising:

a first interface program executing (2) on a remote computer to provide an

interface screen for an industrial controller [a web browser (first interface program) on a user remote computer (Fig. 2, item 220) that displays on remote computer web pages include controller data obtained from one or more I/O modules (interface screen for industrial controller (col. 3, lines 34-36)].

a second interface program executing on (16) a Web server communicating with the remote computer over the Internet process [Fig. 2, item 1252, second interface program on web server 1002, in communication with remote computer 200 over network 215 which is the Internet (col. 10; lines 24)] and further communicating with an industrial control system controlling an industrial process through input and output data communicated with the industrial process [the server communicates with industrial device via I/O (Fig. 1, 1201; 1202)] and

the first and second interface program execute to provide a protocol [the browser (first interface) and the network interface both use HTTP (protocol) to make web pages available to the user (col. 6, lines 8-15)] so that the first interface program discover and instance software objects related to the input and output data and stored on the Web server [software objects relate to I/O data of industrial device is either created or selected from pre programmed object-template list (col. 10, lines 54-63). The objects are displayed by the browser (first interface) to the programmer to review the objects (discovery) and select the software object related to I/O data (col. 11, line 62-col. 12, line 9; col. 15, line 65-col. 16, lines14, col. 19, line 27-col. 20, line 4], the first interface program uses pre-written software objects to implement the interface [software objects are preprogrammed col. 10, lines 53-56].

wherein the protocol provides for at least one persistence instruction preserving an instance of a software object on the Web server during a cessation of a communication session on the Internet between the remote computer and the Web server [an applet (an applet (an instruction that preserves an instance of a software object) transmitted by the controller with the web page to the client (col.7, lines 7-10), i.e. the applet is on the web server. the applet is capable of updating the viewer's display every 15 sec (i.e., persistence instruction). the applet causes the browser to communicate with the server controller every 15 sec to obtain new Cap-Time data (i.e., the persistent applet causes communication after session cessation every 15 sec.) (col. 20, lines 26-37)].

As to claim 5, Crater further discloses the characteristics are object properties, object constructors, object methods, and object events [object properties (col. 10, lines 64-66), object constructors (col. 10, lines 57-63), object method (col. 18, lines 65-67)].

As to claim 6, Crater further discloses the protocol provides for a constructor instruction creating an instance of a software object on the Web server (col. 19, lines 27-58).

As to claim 7, Crater further discloses the protocol provides for a set property instruction setting a property of a software object on the Web server (col. 18 , lines 61-67).

As to claim 8, Crater further discloses the protocol provides for an invocation of a method of a software object on the Web server (col. 18, lines 61-67).

As to claim 9, Crater further discloses the protocol provides for an event subscription instruction causing the receipt by the first interface program of event messages from software objects on the Web server (col. 11, lines 28-40).

As to claim 11, Crater further discloses wherein the first and second interface programs further execute to:

connect the remote computer using a Web browser program to a first Web page providing the first interface program [figs. 1-2; remote user 200 connects to web server 1001, 1002, via a web browser 220 to access a web page (col. 10, lines 10-12)].

read the first interface program into the remote computer and execute it at the remote computer [the webpage applet is copied (read) to the browser (first interface on the remote computer) (col. 10, lines 14-17)]; and

connect the Web browser program to the Web server communicating with the industrial control system [Fig. 2, the web browser is connected to server 1001, 1002, that controls the industrial devices].

As to claim 12, Crater further discloses the software software objects are store on a Web server other than the Web server communicating with the industrial control system [web page can reside on a web server other than web server communicating with the control system (col. 9, lines 21-41)].

As to claim 13, Crater further discloses the first interface program is a Java applet (col. 13, lines 36-39).

As to claim 14, Crater further discloses the software objects stored on the Web server include graphic display elements (Fig. 9, col. 9, lines 6-7).

As to claim 15, Crater further discloses the software objects stored on the Web server include graphic control elements (fig. 5A).

As to claim 21, refer to claim 1 rejection.

As to claim 24, refer to claim 4 rejection.

As to claim 25, refer to claim 5 rejection.

As to claim 26, refer to claim 6 rejection.

As to claim 27, refer to claim 7 rejection.

As to claim 28, refer to claim 8 rejection.

As to claim 29, refer to claim 9 rejection.

As to claim 31, refer to claim 11 rejection.

As to claim 32, refer to claim 12 rejection.

As to claim 33, refer to claim 13 rejection.

As to claim 34, refer to claim 14 rejection.

As to claim 35, refer to claim 15 rejection.

5. Claims 2-4, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable by Carter et al. [US.Pat. No. 6,201,996] as applied to claims 1 &21 above and further in view of Aaron Skonnard "SOAP, The Simple Object Access Protocol", p. 1-16, Jan 2000.

As to claims 2&3, Crater further discloses the use of HTTP protocol .

Cater does not discloses wherein the protocol provides for the communication of instructions between the first interface program and the second interface program using the SOAP protocol, and wherein multiple instructions are transmitted in a single SOAP

protocol message and wherein a call arrangement of the SOAP protocol is selected from the group consisting of sequential, nested, and a combination of both.

Aaron discloses that SOAP (simple access protocol) defines the use of XML and HTTP to access services, objects and server in a platform independent manner and facilitate interoperability (p. 1, lines 14-17). SOAP combines HTTP and XML into a single solution gives a whole new level of interoperability and once SOAP become standard, bridge for specific technologies will not longer be necessary. SOAP is simple protocol that codifies existing practices into an industry standard form which everyone can benefit (p. 2, lines 9-20). SOAP defines 3 extended HTTP headers (multiple instruction in a single SOAP message). (p. 4, last three lines), the call elements are arranged sequential (p. 7, lines 11-25).

One of ordinary skill in the art would recognize that Crater's system that uses HTTP protocol is not in an industry standard form and requires bridging to other technologies and the use of a simple protocol would codify the HTTP protocol into an industry standard form that does not require bridging and facilitate interoperability.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Aaron's teachings to modify the system of Carter by using SOAP protocol to provide instructions between the first interface program and the second interface program, wherein the call arrangement is sequential and multiple instructions are transmitted in a single SOAP message in order to achieve a simple Protocol that the provides an industry standard, does not require bridging and facilitate Interoperability.

As to claim 22, refer to claim 2 rejection.

As to claim 23, refer to claim 3 rejection.

As to claim 4, Crater does not disclose the SOAP protocol provides for a discovery instruction to be transmitted from the first interface program that causes the second interface program to provide characteristics of the software objects.

Aaron discloses a SOAP (simple access protocol) that use XML and HTTP to access services, objects and servers in a platform independent manner (p. 1, lines 21-25). SOAP protocol is used for remote scripting to call server side script functions (second interface program software objects) directly from a browser's client-side script over HTTP (discovery instructions from first interface) (p. 3, lines 19-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Aaron's teachings to modify the system of Carter by using SOAP protocol to provides for a discovery instruction to be transmitted from the first interface program (browser's client script) that causes the second interface program (server side script), to provide characteristics of the software objects in order to achieve a simple Protocol that is platform independent and does not require bridging and facilitate interoperability.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu Le whose telephone number is (571) 272-3897. The examiner can normally be reached on Monday to Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Caldwell Andrew, can be reached on (571) 272-3868. The fax phone number for this Group is (571)-273-3897.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) **273**-8300.

Hieu Le

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER